fairly substantial. The postoperative cost over 48 hours is slightly higher for abdominal surgeries compared to THA or TKA.

PSY25
ECONOMIC EVALUATION OF PROPHYLACTIC TREATMENT VS ON DEMAND FOR MODERATE HEMOPHILIA A IN COLOMBIA
Ordoñez Molina JE[1], Duque JG[1], Gutierrez-Ardila MV[2]
[1]HEMOGROUP Hematoncology Medical Center, Medellín, Colombia, [2]Pfizer S.A.S., Bogotá, Colombia
OBJECTIVES: Hemophilia A is a genetic disease in which there is a deficiency in the level of activity of the clotting factor VIII, the moderate form is defined as a blood clotting factor level from 0.01 to 0.05 IU/ml. The aim of this analysis is to estimate the cost-effectiveness of prophylactic treatment of moderate hemophilia A compared to demand treatment in Colombia. **METHODS:** A decision tree model was developed using a life expectancy horizon and a societal perspective; annual discount rate of 3% was applied to costs and effectiveness measures. Prophylactic treatment with recombinant factor VIII (25 IU/kg 3 times per week) was compared to on demand treatment (40 IU/kg BID for 3.5 days for each bleeding episode). The base case was simulated based on a patient of 8 years old and weight of 31kg without inhibitors. Effectiveness and probabilities of adverse events were taken from the literature. Costs (direct and indirect) were taken from local tariff manuals (SOAT and SISMED). Effectiveness measures were number of cases avoided of bleeding, hemarthrosis and arthropathies. All data were validated with a clinical expert. Univariate sensitivity analysis was done. Costs are presented in 2013 USD (exchange rate US$1 = $ 1927 COP). **RESULTS:** Over the time horizon, prophylactic treatment avoids 277 episodes of bleeding and 23 of joint damage. Total expected costs with prophylactic treatment were US$ 2.7M compared to on demand treatment US$ 2.4M. The incremental cost effectiveness ratios (ICER) for prophylactic treatment were US$ 1,056/avoided bleeding and US$12,512/avoided hemarthrosis/arthropathies. Sensitivity analysis showed the robustness of the results (average ICER US$ 1,153/avoided bleeding). **CONCLUSIONS:** From the social perspective, prophylactic treatment of moderate hemophilia A, with recombinant factor VIII would be a highly cost-effectiveness intervention with strong health benefits in number of cases of bleeding and joint damage avoided.

PSY26
COST-EFFECTIVENESS ANALYSIS OF PROPHYLAXIS VS ON-DEMAND SUPPLY OF FACTOR IX IN PATIENTS DIAGNOSED WITH MODERATE HEMOPHILIA B IN COLOMBIA
Ordoñez Molina JE[1], Duque JG[1], Gutierrez-Ardila MV[2]
[1]HEMOGROUP Hematoncology Medical Center, Medellín, Colombia, [2]Pfizer S.A.S., Bogotá, Colombia
OBJECTIVES: Hemophilia B is a genetic disease characterized by a defect in coagulation factor IX, needed for this function. Moderate hemophilia is defined as a blood clotting factor level from 1 to 5 % of normal, some people from this group, can have bleeding similar to people with severe hemophilia; most of them, has one bleeding episode monthly. This analysis is aimed to estimate the cost-effectiveness of prophylactic treatment of moderate hemophilia B, compared to on demand treatment in Colombia. **METHODS:** A decision tree model was developed using a time horizon of life expectancy. A societal perspective was adopted, and an annual discount rate of 3% was applied to costs and effectiveness measures. Prophylactic treatment with recombinant factor IX (25 IU/kg 3 times per week) was compared to on demand treatment (40 IU/kg BID for 4.5 days for each bleeding episode). Simulation of base case was applied for a patient of 10 years, weight of 37 kg without inhibitors. Effectiveness and probabilities of adverse events were taken from a literature. Costs (direct and indirect) were taken from local tariff manuals (SOAT and SISMED). Costs are presented in 2013 US$ (1$ USD = $ 1 927 COP). Effectiveness measures were number of cases avoided of bleeding, hemarthrosis and arthropathy. All data were validated with a clinical expert. Univariate sensitivity analysis was done. **RESULTS:** Over the time horizon, prophylactic treatment avoids 275 episodes of bleeding and 23 of joint damage. Total expected costs with prophylactic treatment were US$ 7.4M compared to on demand treatment US$ 8.2M, generating savings of US$ 870,778. Sensitivity analysis showed the robustness of the results (99.3 % dominant) **CONCLUSIONS:** Prophylactic treatment of moderate hemophilia B, with recombinant factor IX would be a cost-saving intervention from the social perspective.

PSY27
A COST-EFFECTIVENESS STUDY OF INTRAVENOUS IMMUNOGLOBULIN IN CHILDHOOD IDIOPATHIC THROMBOCYTOPENIA PURPURA PATIENTS WITH LIFE-THREATENING BLEEDING
Sruamsiri R[1], Dilokthornsakul P[2], Chaiyakunapruk N[3], Pratoomsoot C[4]
[1]Center of Pharmaceutical Outcomes Research, Naresuan University, Phitsanulok, Thailand, [2]Center of Pharmaceutical Outcomes Research, Naresuan University, Muang, Phitsanulok, Thailand, [3]Discipline of Pharmacy, Selangor, Malaysia, [4]Muang, Thailand
OBJECTIVES: Although the international guideline recommended intravenous immunoglobulin (IVIG) as the first-line treatment for childhood idiopathic thrombocytopenia purpura (ITP) with life threatening bleeding, ITP patients may not be able to access IVIG due to the limitation of health benefit packages especially those in developing countries. There remains an important policy question whether IVIG used as first-line treatment is worth the money spent. Thus, the objective of this study is to perform the cost-effectiveness analysis of adding IVIG to standard treatment of platelet transfusion and corticosteroid, for the treatment of childhood ITP with life threatening bleeding. **METHODS:** A cost- effectiveness analysis using a hybrid model consisting of a decision tree and Markov models was conducted under societal perspective. The effectiveness and utility parameters were determined by systematic reviews, while costs and mortality parameters were determined using retrospective electronic hospital database analysis. The discount rate of 3% was applied for both costs and outcomes. One-way and probabilistic sensitivity analyses were also performed. **RESULTS:** The incremental cost-effectiveness ratio (ICER) was $ 2,063 per quality-adjusted life year gained ($/QALY) for the addition of IVIG versus standard treatment alone. Mortality parameter was the most influential parameter on ICER. According to willingness-to-pay of Thailand, of approximately $3,861 per QALY gained, the probability of IVIG being cost-effective was 28%. **CONCLUSIONS:** The addition of IVIG to standard treatment in the treatment of childhood ITP with life threatening bleeding is a cost-effective intervention in Thailand. This evidence supported the decision-making that IVIG should be included in the health-benefit package as the first-line therapy of childhood ITP with life threatening bleeding.

PSY28
A SYSTEMATIC LITERATURE REVIEW OF ECONOMIC EVALUATIONS RELATED TO PATIENTS WITH RELAPSED OR RELAPSED AND REFRACTORY MULTIPLE MYELOMA
Rizzo M[1], Xu Y[2], Panjabi S[3], Iheanacho I[1]
[1]Evidera, London, UK, [2]Evidera, Lexington, MA, USA, [3]Onyx Pharmaceuticals, Inc., An Amgen Subsidiary, South San Francisco, CA, USA
OBJECTIVES: Published cost-effectiveness evidence on the various treatments used for relapsed or relapsed and refractory multiple myeloma (R or RRMM) has not been explored in a systematic literature review (SLR). We therefore investigated this topic using such an approach. **METHODS:** We searched MEDLINE, EMBASE, The Cochrane Library and EconLit databases for English-language economic evaluations of pharmaceuticals for directly managing R or RRMM published after 2003. Publication quality was assessed using standard Drummond criteria. **RESULTS:** Overall, 14 publications on nine primary economic models met the inclusion criteria. These involved comparisons between lenalidomide + dexamethasone and dexamethasone (n=3) and between lenalidomide +/- dexamethasone and bortezomib (n=7), of which some compared all these options (n=2); and between bortezomib and best supportive care (n=1). The studies varied in their geographical focus and economic perspective and, accordingly, the willingness-to-pay thresholds used. Bortezomib was cost-effective compared with dexamethasone in Sweden (moderate-quality study) and the UK (UK; abstract-only data), but neither study reported the perspective used. From a UK payer's perspective, lenalidomide + dexamethasone was cost-effective compared to dexamethasone (but only 50% of the time in a probabilistic sensitivity analysis). Comparisons between lenalidomide + dexamethasone and bortezomib had varied results. Lenalidomide was dominant to bortezomib in a model for Russia (abstract-only data) and lenalidomide + dexamethasone was cost-effective compared with bortezomib in studies for Portugal (societal perspective; abstract-only data), Greece (payer's perspective; high-quality study) and Norway (payer's perspective; moderate-quality study). However, bortezomib was dominant to lenalidomide + dexamethasone in evaluations for Sweden (moderate-quality study) and the UK (abstract-only data), with neither clearly reporting the perspective used. **CONCLUSIONS:** The published cost-effectiveness evidence on lenalidomide versus bortezomib – the two most commonly used drugs for R or RRMM – is inconsistent. Our review suggests that none of the drugs available for this population represent an economically dominant option.

PSY29
A COST-EFFECTIVENESS ANALYSIS OF MATERNAL GENOTYPING TO GUIDE TREATMENT FOR POSTPARTUM PAIN AND AVERT INFANT ADVERSE EVENTS
Moretti ME[1], Ungar WJ[1], Berger H[2], Koren G[1], Ito S[1]
[1]Hospital for Sick Children, Toronto, ON, Canada, [2]St. Michael's Hospital, Toronto, ON, Canada
OBJECTIVES: Pharmacogenomic testing can be used to identify ultrarapid metabolizers (UM) of codeine to ensure safe drug dosing in breastfeeding women. The objective of the study was to determine the incremental costs of genotyping in averting neonatal adverse events during maternal pharmacotherapy. **METHODS:** We performed a cost effectiveness analysis to determine the incremental costs of genotyping to guide codeine use compared to standard care per infant adverse event averted . The base case was a prenatal patient whose metabolizer status was unknown but who may need to be prescribed codeine-containing analgesics for pain relief after delivery and planned to breast feed her child. Parameter estimates and costs were ascertained from a concurrent clinical study, from the literature and expert opinion. **RESULTS:** Genetic testing to guide pharmacotherapy for maternal analgesia resulted in a cost of $3400 per adverse event averted or $740 per infant symptom day averted, when compared to standard care. The results were not sensitive to a number of key variables in one way analysis, namely, cost of genetic testing and the probability of UM in the population. The results were sensitive to the probability of codeine use in the population and the costs of a hospital admission. This study was limited by a small number of trials from which parameter estimates could be extracted and the very small number of adverse events reported in infants. **CONCLUSIONS:** Although genotyping to guide pharmacotherapy was not cost saving, the cost to avert an infant adverse event may represent good value for money. It is not yet known whether implementation would be feasible, however these findings will have implications for new mothers and their health care providers world-wide.

PSY30
MANAGEMENT OF SPINAL CORD INJURY-ASSOCIATED NEUROPATHIC PAIN WITH PREGABALIN IS COST-EFFECTIVE OVER GABAPENTIN
Patel NV, Hay JW
University of Southern California, Los Angeles, CA, USA
OBJECTIVES: Neuropathic pain (NeP) affects more than 75% of the spinal cord injury (SCI) patients. Nearly half of the SCI patients in the United States were prescribed gabapentin for management of NeP even though gabapentin is not indicated for NeP. Pregabalin is indicated for NeP in the UK and United States, but only 16% of the SCI patients in the United States were prescribed pregabalin. This study evaluates cost-effectiveness of pregabalin and gabapentin in management of NeP from the societal perspective. **METHODS:** We have used a Markov model to simulate costs and effectiveness for 1,000 patients treated with placebo, pregabalin and gabapentin over a 5-year period with a monthly cycle. Transition probabilities for placebo and pregabalin were estimated based on a double-blind, randomized controlled trial. High-quality clinical data for gabapentin effectiveness is not available and thus